

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

1. (CURRENTLY AMENDED) An apparatus comprising:

11
5 a first circuit configured to calculate and ~~present~~ write
an output signal having a first resolution and a plurality of input
pixels to a memory in response to (i) an input signal having a
second resolution and a plurality of output pixels read from said
memory and (ii) one or more control signals; and

10 a second circuit configured to generate said control
signals in response to (i) a previous calculation by said first
circuit and (ii) one or more input parameters, wherein said first
circuit is configured to scale and filter said input signal to
allow one or more of said input pixels to contribute to the
creation of one or more of said output pixels.

2. (ORIGINAL) The apparatus according to claim 1,
wherein said input signal comprises a 3-component video signal.

3. (ORIGINAL) The apparatus according to claim 1,
wherein said input signal comprises a 3-component video signal with
a separate alpha component.

4. (ORIGINAL) The apparatus according to claim 1, wherein said first circuit independently calculates a horizontal component and a vertical component of said output signal.

5. (ORIGINAL) The apparatus according to claim 1, wherein said apparatus comprises a portion of a block move engine (BME).

6. (ORIGINAL) The apparatus according to claim 1, wherein said apparatus is configured to operate on one or more blocks of data.

7. (ORIGINAL) The apparatus according to claim 6, wherein said apparatus is configured to read a block of data a scan line at a time.

8. (CURRENTLY AMENDED) The apparatus according to claim 7, wherein said apparatus is configured to (i) process said scan line, (ii) write said scan line back to a said memory and (iii) process a next scan line.

9. (ORIGINAL) The apparatus according to claim 1, wherein said apparatus is configured to filter data providing improved appearance of scaled images.

10. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said apparatus is configured to allow ~~a one~~ two or more of said input pixels to contribute to the creation of one or more of said output pixels.

11. (ORIGINAL) The apparatus according to claim 1, wherein said apparatus is configured to scale alpha data associated with an image.

12. (CURRENTLY AMENDED) An apparatus comprising:
means for calculating an output signal having a first resolution and a plurality of output pixels to write to a memory in response to (i) an input signal having a second resolution and a plurality of input pixels read from said memory and (ii) one or more control signals;

means for generating said control signals in response to (i) a previous calculation by said means for calculating first circuit and (ii) one or more input parameters; and

means for scaling and filtering said input signal to allow one or more of said input pixels to contribute to the creation of one or more of said output pixels.

13. (CURRENTLY AMENDED) A method for scaling and filtering of video, comprising the steps of:

(A) calculating an output signal having a first resolution and a plurality of output pixels in response to (i) an
5 input signal having a second resolution and a plurality of input pixels and (ii) one or more control signals;

9/1/02
(B) generating said control signals in response to (i) a previous calculation by ~~said first circuit step (A)~~ and (ii) one or more input parameters; and

10 (C) scaling and filtering said input signal to allow one or more of said input pixels to contribute to the creation of one or more of said output pixels.

1413. (CURRENTLY AMENDED) The method according to claim 1312, wherein said input signal comprises a 3-component video signal.

1514. (CURRENTLY AMENDED) The method according to claim 1312, wherein said input signal comprises a 3-component video signal with a separate alpha component.

1615. (CURRENTLY AMENDED) The method according to claim 1312, wherein step (A) further comprises:

independently calculating a horizontal component and a vertical component of said output signal.

1716. (CURRENTLY AMENDED) The method according to claim 1312, further comprising the step of:

operating on one or more blocks of data.

Pl Cont
1817. (CURRENTLY AMENDED) The method according to claim 1716, further comprising the step of:

reading a block of data a scan line at a time.

1918. (CURRENTLY AMENDED) The method according to claim 1817, further comprising the step of:

(i) processing said scan line, (ii) writing said scan line back to a memory and (iii) processing a next scan line.

2019. (CURRENTLY AMENDED) The method according to claim 1312, further comprising the step of:

filtering to data provide improved appearance of scaled images.

2120. (CURRENTLY AMENDED) The method according to claim 1312, further comprising the step of:

allowing one or more input pixels to contribute to the creation of ~~one~~ two or more output pixels.

22. (NEW) The apparatus according to claim 1, further comprising:

PA/Cont
a microprocessor coupled to said second circuit through a bus.